

Amendments to Claims

Claims 1-15 (cancelled)

16. (new) An isolated polynucleotide comprising:
 - (a) a nucleotide sequence encoding a polypeptide having phosphoribosylformimino-5-aminoimidazole carboxamide ribotide isomerase activity, wherein the amino acid sequence of the polypeptide and SEQ ID NO:22 have at least 80% sequence identity, based on the Clustal alignment method with default pairwise alignment parameters of KTUPLE=1, GAP PENALTY=3, WINDOW=5 and DIAGONALS SAVED=5, or
 - (b) the entire complement of the nucleotide sequence of (a).
17. (new) The polynucleotide of Claim 16, wherein the amino acid sequence of the polypeptide and SEQ ID NO:22 have at least 85% sequence identity, based on the Clustal alignment method with said default pairwise alignment parameters.
18. (new) The polynucleotide of Claim 16, wherein the amino acid sequence of the polypeptide and SEQ ID NO:22 have at least 90% sequence identity, based on the Clustal alignment method with said default pairwise alignment parameters.
19. (new) The polynucleotide of Claim 16, wherein the amino acid sequence of the polypeptide and SEQ ID NO:22 have at least 95% sequence identity, based on the Clustal alignment method with said default pairwise alignment parameters.
20. (new) The polynucleotide of claim 16, wherein the amino acid sequence of the polypeptide comprises SEQ ID NO:22.
21. (new) The polynucleotide of claim 16, wherein the nucleotide sequence comprises SEQ ID NO:21.
22. (new) A recombinant DNA construct comprising the polynucleotide of claim 16 operably linked to a regulatory sequence.
23. (new) A vector comprising the polynucleotide of claim 16.
24. A method for transforming a cell comprising transforming a cell with the polynucleotide of claim 16.
25. (new) A cell comprising the recombinant DNA construct of claim 22.
26. (new) A method for producing a plant comprising transforming a plant cell with the polynucleotide of claim 16 and regenerating a plant from the transformed plant cell.
27. (new) A plant comprising the recombinant DNA construct of claim 22.
28. (new) A seed comprising the recombinant DNA construct of claim 22.